

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (Canceled)

21. (Withdrawn) A honeycomb catalyst carrier comprising:

a honeycomb formed cell structure composed of a porous material having a large number of pores, the cell structure having cells each functioning as a fluid passage; and an outer wall composed of a porous material disposed so as to cover an outer periphery of the cell structure,

wherein the honeycomb catalyst carrier further comprises:

i) an impregnated part formed in an outermost peripheral part, which has a given thickness, of the porous material of the cell structure, the impregnated part being impregnated with a water-insoluble organic material which disappears by burning or an inorganic material; or

ii) an intermediate layer of an inorganic material formed between an outer periphery of the cell structure and an inner surface of the outer wall.

22. (Withdrawn) The honeycomb catalyst carrier according to claim 21, wherein

a permeability (k) of the impregnated part defined by the following equation (1) is lower than that of the other part of the porous material of the cell structure; or.

a permeability(k) of the intermediate layer defined by the following equation (1) is lower than that of the porous material of the cell structure.

$$k = (\mu \cdot L / A)(\Delta Q / \Delta P) \quad (1)$$

k: permeability ( $\mu\text{m}^2$ )

$\mu$ : viscosity coefficient of air at 20 deg.C ( $\mu\text{Pa}\cdot\text{sec}$ )

L: thickness of sample (mm)

A: air-permeating area of sample (cm<sup>2</sup>)

$\Delta Q/\Delta P$ : gradient of “discharge air flow rate / compressed air pressure”

((cc/sec)/psi)

23. (Withdrawn) The honeycomb catalyst carrier according to claim 21, wherein the permeability(k) of the impregnated part or the intermediate layer is 0.7  $\mu\text{m}^2$  or less.

24. (Withdrawn) A honeycomb catalyst carrier comprising:

a honeycomb formed cell structure composed of a porous material having a large number of pores, the cell structure having cells each functioning as a fluid passage;

and an outer wall composed of a porous material disposed so as to cover an outer periphery of the cell structure,

wherein the honeycomb structure further comprises:

iii) an impregnated part formed in an outermost peripheral part, which has a given thickness, of the porous material of the outer wall, the impregnated part being impregnated with a water-insoluble organic material which disappears by burning or an inorganic material;

iv) an impregnated part formed in the whole porous material of the outer wall, the impregnated part being impregnated with a water-insoluble organic material which disappears by burning or an inorganic material; or

v) a coat layer formed so as to cover an outer periphery of the outer wall, the coat layer comprising a water-insoluble organic material which disappears by burning or an inorganic material.

25. (Withdrawn) The honeycomb catalyst carrier according to claim 24, wherein

a permeability (k) of the impregnated part defined by the following equation (1) is lower than that of the other part of the porous material of the outer wall; or

a permeability(k) of the coat layer defined by the following equation (1) is

lower than that of the porous material of the outer wall.

$$k = (\mu \cdot L/A)(\Delta Q/\Delta P) \quad (1)$$

k: permeability ( $\mu\text{m}^2$ )

$\mu$ : viscosity coefficient of air at 20 deg.C ( $\mu\text{Pa}\cdot\text{sec}$ )

L: thickness of sample (mm)

A: air-permeating area of sample ( $\text{cm}^2$ )

$\Delta Q/\Delta P$ : gradient of "discharge air flow rate / compressed air pressure"

((cc/sec)/psi)

26. (Withdrawn) The honeycomb catalyst carrier according to claim 24, wherein the permeability(k) of the outer wall having the impregnated part or having the coat layer is  $0.04 \mu\text{m}^2$  or less.

27. (Withdrawn) The honeycomb catalyst carrier according to claim 21, wherein the organic material for forming the impregnated part is a petroleum hydrocarbon oil, a silicone oil, a thermoplastic resin, a thermosetting resin, a wax or a mixture thereof.

28. (Withdrawn) The honeycomb catalyst carrier according to claim 24, wherein the organic material for forming the impregnated part or the coat layer is a petroleum hydrocarbon oil, a silicone oil, a thermoplastic resin, a thermosetting resin, a wax or a mixture thereof.

29. (Withdrawn) The honeycomb catalyst carrier according to claim 21, wherein the inorganic material for forming the impregnated part is a ceramic sol, an alkylsilane compound or a mixture thereof.

30. (Withdrawn) The honeycomb catalyst carrier according to claim 24, wherein the inorganic material for forming the impregnated part or the coat layer is a ceramic sol, an alkylsilane compound or a mixture thereof.

31. (Withdrawn) The honeycomb catalyst carrier according to claim 21, wherein the inorganic material for forming the intermediate layer is one or more of ceramics.

32. (Withdrawn) The honeycomb catalyst carrier according to claim 24, wherein the inorganic material for forming the coat layer is one or more of ceramics.

33. (Withdrawn) The honeycomb catalyst carrier according to claim 24, wherein the organic material for forming the coat layer is a thermoplastic resin, a thermosetting resin, a wax, or a natural or synthetic rubber.

34. (Currently Amended) A method for production of a honeycomb catalyst carrier having a honeycomb formed cell structure composed of a porous material having a large number of pores, the cell structure having cells each functioning as a fluid passage,

wherein the method comprises a step selected from the group consisting of:

i) impregnating a water-insoluble organic material which disappears by burning or an inorganic material into an outermost peripheral part, which has a given thickness, of the porous material of the cell structure to form an impregnated part; and then disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure;

ii) applying an inorganic material to an outer periphery of the cell structure to form an intermediate layer; and then disposing an outer wall composed of a porous material so as to cover the intermediate layer;

iii) disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure, and then impregnating a water-insoluble organic material which disappears by burning or an inorganic material into an outermost peripheral part, which has a given thickness, of the porous material of the outer wall to form an impregnated part;  
and

iv) disposing an outer wall composed of a porous material so as to cover an

outer periphery of the cell structure; and then impregnating a water-insoluble organic material which disappears by burning or an inorganic material into the whole porous material of the outer wall to form an impregnated ~~part; and~~ part.

~~—— v) disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure, and then applying a water-insoluble organic material which disappears by burning or an inorganic material so as to cover an outer periphery of the outer wall to form a coat layer.~~

35. (New) The method of claim 34, wherein the impregnating step in option i) includes impregnating the water-insoluble organic material, the method further comprising the step of:

firing the cell structure, wherein firing the cell structure comprises a sub-step of burning the water-insoluble organic material out.

36. (New) The method of claim 34, wherein the impregnating step in option iii) includes impregnating the water-insoluble organic material, the method further comprising the step of:

firing the cell structure, wherein firing the cell structure comprises a sub-step of burning the water-insoluble organic material out.

37. (New) The method of claim 34, wherein the impregnating step in option iv) includes impregnating the water-insoluble organic material, the method further comprising the step of:

firing the cell structure, wherein firing the cell structure comprises a sub-step of burning the water-insoluble organic material out.